



Figure similar

MLFB-Ordering data

1FK7103-2AF71-1CG1-Z
J29+X01

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data		Mechanical data			
Rated speed (100 K)	3000 rpm	Motor type	Permanent-magnet synchronous motor		
Number of poles	8	Motor type	Compact		
Rated torque (100 K)	14.0 Nm	Shaft height	100		
Rated current	11.5 A	Cooling	Natural cooling		
Static torque (60 K)	30.00 Nm	Radial runout tolerance	0.050 mm		
Static torque (100 K)	36.00 Nm	Concentricity tolerance	0.10 mm		
Stall current (60 K)	21.00 A	Axial runout tolerance	0.10 mm		
Stall current (100 K)	26.00 A	Vibration severity grade	Grade A		
Moment of inertia	123.200 kgcm ²	Connector size	1.5		
Physical constants		Degree of protection	IP65		
		Torque constant	1.39 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
		Voltage constant at 20° C	89.5 V/1000*min ⁻¹	Temperature monitoring	Pt1000 temperature sensor
		Winding resistance at 20° C	0.09 Ω	Electrical connectors	Connectors for signals and power rotatable
		Rotating field inductance	2.4 mH	Color of the housing	Jet black, matt RAL 9005
		Electrical time constant	27.00 ms	Holding brake	without holding brake
		Mechanical time constant	1.46 ms	Shaft end	Plain shaft
		Thermal time constant	65 min	Encoder system	Encoder AM24DQI: absolute encoder 24 bits (resolution 16777216, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)
		Shaft torsional stiffness	148000 Nm/rad		
		Net weight of the motor	62.5 kg		
Recommended Motor Module					
		Rated inverter current	30 A		
		Maximum inverter current	90 A		
Maximum torque	108.00 Nm				



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Gearbox data

Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	19.200 kgcm ²
Designation	SP 180S-MF1	Radial output shaft loading, max.	15400 N
Gearbox shaft end	Without feather key	Axial output shaft load, max.	15570 N
Gear ratio + steps	10 (1-step)	Efficiency of gearbox	0.97
Motor speed S3-60 %	4500 rpm	Torsional backlash	3 '
Motor speed S1	2300 rpm	Gearbox weight	34.00 kg
Output torque S1	864 Nm		
Rated output torque at duty type S3-60 %	1164 Nm		

Special design

J29	Mounting of SP+ planetary gearbox
X01	Paint finish: Jet black, matt RAL 9005

Limiting data

Max. permissible speed (mech.)	5000 rpm
Max. permissible speed (inverter)	5000 rpm
Maximum torque	108.0 Nm
Maximum current	84.0 A